| Version 7/03           |  |
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| contacted on matters   |  |
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| er (give area code)    |  |
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| OJECT:                 |  |
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| APPLICATION FOR   |   | p                                   |   |                                 | Version 7/03                                      |  |  |
|---|---|-------------------------------------|---|---------------------------------|---|--|--|
| FEDERAL ASSISTANCE  |   | 2. DATE SUBMITTED<br>March 15, 2005 |   | Applicant Iden                  | Applicant Identifier                              |  |  |
| 1. TYPE OF SUBMISSION: Application  | Pre-application   | 3. DATE RECEIVED BY STATE           |   | State Applicati                 | State Application Identifier                      |  |  |
| Construction  | Construction  | 4. DATE RECEIVED BY FEDERAL AGENCY  |   | CY Federal Identif              | Federal Identifier                                |  |  |
| Non-Construction  | Non-Construction  |                                     |   |                                 |   |  |  |
| 5. APPLICANT INFORMATION  |   |                                     |   | 1 14                            |   |  |  |
| Legal Name:   |   |                                     | Organizational L  | Jnit:                           |   |  |  |
| State Road and Tollway Authorit   | у   |                                     | Department.   |                                 |   |  |  |
| Organizational DUNS:  |   |                                     | Division:   |                                 |   |  |  |
| Address:  |   |                                     |   |                                 | rson to be contacted on matters                   |  |  |
| Street:<br>1170 Marietta St. NW   |   |                                     | involving this application (give area code)  Prefix: First Name:                              |                                 |   |  |  |
| Suite 2500  |   |                                     | Mr. Erik  |                                 |   |  |  |
| City:   |   |                                     | Middle Name   |                                 |   |  |  |
| County:   |   |                                     |   | Last Name<br>Steavens           |   |  |  |
| DeKaĺb<br>State:  | Zip Code<br>30303   |                                     | Suffix:   |                                 |   |  |  |
| Georgia Country:  | 30303   |                                     | Email:  | raiatolla com                   |   |  |  |
| 6. EMPLOYER IDENTIFICATIO   | N NIIMBED /EINI\  |                                     | esteavens@geo<br>Phone Number (   | <del>. T</del>                  | Fax Number (give area code)                       |  |  |
| 5 8 - 1 5 4 1 0 8 4   | N NOMBER (EIN).   |                                     | 404-893-6139  | give area code,                 | 404-893-6144                                      |  |  |
| 8. TYPE OF APPLICATION:   |   |                                     | 7. TYPE OF APP  | PLICANT: (See bac               | k of form for Application Types)                  |  |  |
| √ New   |   | n Revision                          | A. State  |                                 |   |  |  |
| If Revision, enter appropriate lette<br>(See back of form for description       |   |                                     | Other (specify)   |                                 |   |  |  |
| Other (specify)   | - Annual Property of the Control of |                                     | 9. NAME OF FE<br>Federal Highway  | DERAL AGENCY: Administration    |   |  |  |
| 10. CATALOG OF FEDERAL D  | OMESTIC ASSISTANC   | E NUMBER:                           | 11. DESCRIPTIN  | E TITLE OF APPLI                | CANT'S PROJECT:                                   |  |  |
|   |   | 2 0 - 2 0 5                         | GA 400 Variable   | Pricing Institutional           | Study   |  |  |
| TITLE (Name of Program):  |   |                                     |   |                                 |   |  |  |
|   |   |                                     |   |                                 |   |  |  |
| 12. AREAS AFFECTED BY PROFULE Fulton County and DeKalb Courty                   | •   | s, States, etc.):                   |   |                                 |   |  |  |
| 13. PROPOSED PROJECT  | ny m doorgia  |                                     | 14 CONGRESS   | IONAL DISTRICTS                 | OF:   |  |  |
| Start Date:   | Ending Date:  |                                     | a. Applicant  |                                 | b. Project  |  |  |
| December 2005   | December 2006   |                                     | 5th   |                                 | 5th and 6th                                       |  |  |
| 15. ESTIMATED FUNDING:  |   |                                     | 16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?                  |                                 |   |  |  |
| a. Federal \$   |   | 444,000                             | a. Yes. THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 |                                 |   |  |  |
| b. Applicant \$   |   | 111,000                             | PROCESS FOR REVIEW ON   |                                 |   |  |  |
| c. State \$   |   | .00                                 | DAT   |                                 |   |  |  |
| d. Local \$   |   | .00                                 | b. No. PROGRAM IS NOT COVERED BY E. O. 12372  |                                 |   |  |  |
| e. Other \$   |   | .00                                 |   | PROGRAM HAS NO                  | OT BEEN SELECTED BY STATE                         |  |  |
| f. Program Income \$  |   | .00                                 | 17. IS THE APP  | LICANT DELINQUE                 | NT ON ANY FEDERAL DEBT?                           |  |  |
| g. TOTAL \$   |   | 555,000 ·                           | 1   | attach an explanatio            |   |  |  |
| 18. TO THE BEST OF MY KNO<br>DOCUMENT HAS BEEN DULY<br>ATTACHED ASSURANCES IF 1 | AUTHORIZED BY THE   | GOVERNING BODY OF                   | PLICATION/PREA<br>THE APPLICANT   | PPLICATION ARE AND THE APPLICA  | TRUE AND CORRECT. THE<br>ANT WILL COMPLY WITH THE |  |  |
| a. Authorized Representative  |   |                                     | L   | I della Ni                      |   |  |  |
| Prefix<br>Mr.   | First Name<br>Douglas   |                                     |   | liddle Name                     |   |  |  |
| Last Name<br>Hooker   |   |                                     |   | uffix                           |   |  |  |
| b. Title<br>Executive Director  |   |                                     |   | Telephone Number<br>04-893-6100 | (give area code)                                  |  |  |
| d. Signature of Authorized Repre  | sentative )   | 0 0 M                               |   | Date Signed                     |   |  |  |
|   |   | Ses V. a Total)                     |   |                                 | Ctandard Form 424 (Pay 0.3002)                    |  |  |

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# **GA 400 VARIABLE PRICING INSTITUTIONAL STUDY**

FHWA Value Pricing Pilot Program Integrated 10-Point Detailed Proposal (DP) and 6-Point Sketch Plan (SP)

Submitted by: State Road and Tollway Authority (SRTA, Georgia)

March 15, 2005

#### INTRODUCTION

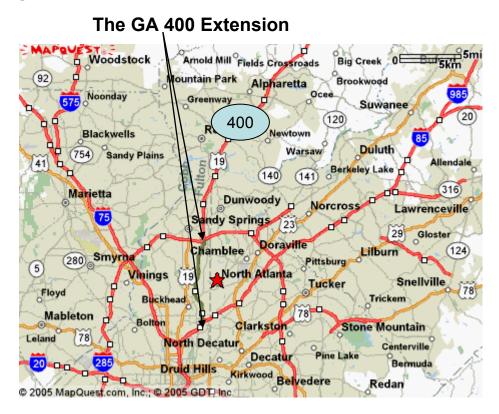
The State Road and Tollway Authority (SRTA), is proposing to study the institutional challenges and feasibility of moving from a fixed-priced toll to a variably priced toll system of GA 400 Extension. SRTA will examine the introduction of two different methods of variability: (1) varying the prices charged to GA 400 Extension users by method of payment (electronic toll collection vs. cash); and (2) varying the prices charged to GA 400 Extension users by time of day.

The goal of this variable pricing study is to examine the feasibility and viability of using variable pricing techniques to shift traffic congestion on the GA 400 Extension and on the rest of the GA 400 corridor.

### 1. CONGESTION PROBLEM TO BE ADDRESSED (DP1 & SP1)

A description of the congestion problem being addressed (current and projected) [DP1]. Congestion problem to be addressed [SP 1].

The GA 400 extension is a 6.2 mile tolled facility located in Fulton County, Georgia. The GA 400 extension provides a critical link between the northern portion of Atlanta's Bypass (I-285) and I-85 en route to downtown Atlanta. The map below shows the extents of the GA 400 Extension.



The GA 400 extension handles approximately 120,000 vehicles per day. During high peak times of the day, high levels of traffic congestion is noticed at the toll plaza, which causes the users of the GA 400 Extension and drivers on connecting roadways such as I-285 and I-85 to experience delays.

Traffic on the GA 400 Extension has exceeded the original travel projections for the roadway. This high level of traffic is in part due to the growth that has been experienced in the GA 400 Corridor. Significant growth has taken place in the Fulton and Forsyth County area, which has 557,526 and 126,573 registered vehicles, respectively (Source: Georgia Department of Motor Vehicle Safety). The growth in Fulton County from 1990-2000 was 26%, the growth in Forsyth County from 1990-2000 was 123%. In Alpharetta alone, the population change from 1990-2000 was 149% (Source: U.S. Census Bureau).

As a result of this growth, high levels of congestion occur GA 400 north of I-285 (north of the GA 400 Extension) and on the I-85 Downtown Connector (south of the GA 400 Extension). Time of day pricing will have a positive impact on spreading the peaks on these two extremely congested highways.

A shift in traffic from peak times of the day and/or to high speed electronic toll collection (ETC) lanes will maximize the use of the toll plaza on the GA 400 Extension and improve the flow of vehicles on GA 400. The reduction of traffic and delays on the GA 400 Extension will have a positive impact of traffic flow on I-285 and I-85 as well.

One of the largest bottlenecks on the GA 400 Extension is at the toll plaza. Delays are incurred by motorists as they slow down to pay the \$0.50 toll at the plaza via a manually operated toll booth (this provides users with change) and the automated collection machine lanes (for users who have exact change). The GA 400 extension also features dedicated lanes that allow electronic toll electronic users to bypass the toll plaza at highway speed. These users see a significant time savings on the GA 400 extension of anywhere from 3 to 10 minutes over users who pay the toll with cash.

GA 400 Extension Traffic Summary for Fiscal Year 2004

| GA 400<br>Traffic Summary | Year Totals | ETC Lanes  | ACM Lanes  | Booth Lanes |
|---------------------------|-------------|------------|------------|-------------|
| Year Totals               | 40,768,381  | 15,291,370 | 15,979,884 | 9,497,127   |
| % Traffic                 |             | 37.5%      | 39.2%      | 23.3%       |

Source: State Road and Tollway Authority

As illustrated above, the ETC lanes (also known as cruise card lanes) are used by 37.5% of the total traffic flowing through the toll plaza. A slight increase in this percentage would make the ETC lanes the most frequently used lanes at the toll plaza. Part of the Authority's strategic plan is migrating more of our customers to electronic toll collection to provide them better travel times on the GA 400 extension while lowering the Authority's administrative cost. Moving to a variable pricing structure may help to facilitate the Authority in meeting this goal.

### 2. PROPOSED PROGRAM DESCRIPTION (DP 2 & SP2)

A description of the proposed pricing program and its goals, including description of facilities included, and, for implementation projects, expected [[Page 23081]] pricing schedules, technology to be used, enforcement programs, and so on [DP 2]. Nature of proposed or potential pricing projects to respond to that problem, including overall project goals, and potential facilities to be included [SP 2].

## Goals and Objectives of the Variable Pricing Program at GA 400 Toll Plaza

The GA 400 Variable Pricing Institutional Study will investigate the institutional challenges and feasibility of moving from a fixed-priced toll to a variably priced toll system of GA 400 Extension. Although many will look at this idea as one to increase the toll rates for toll plaza users, one of the top priorities of this project is to shift some of the traffic which occurs during the peak times of the day to the shoulders or non-peak times. Another important component to this study is examining ways to offer those customers who use the cruise lanes the added benefit of discounted toll rates. Higher cruise card use reduces air pollution to the roadway's neighbors and administrative costs of the Authority by offering drivers a toll lane which gets them to their destination faster.

This study seeks to examine the internal and external issues, and challenges associated with transitioning to a variably priced toll collection system. The pre-project study goals are:

- 1. Provide GA 400 users a more cost-effective and quicker option to use the GA 400 Extension.
- 2. Spread peak-period travel on the GA 400 Extension, I-85, and I-285 to other periods and reducing trips during peak hours through variable user fee at the toll facility.
- 3. Assist the region by meeting the air quality goals by reducing delays at the GA 400 toll plaza.
- 4. Reduce administrative cost for the GA 400 Extension.

#### Potential Facilities to Be Included

The proposed study area will investigate the 6.2 mile GA 400 extension between 285 and 85.

### 3. SOCIAL AND ECONOMIC EFFECTS (DP 3)

Preliminary estimates of the social and economic effects of the pricing program, including potential equity impacts, and a plan or methodology for further refining these estimates for all pricing project(s) included in the program [DP 3].

The social and economic effects of the pricing program are unknown at this time. However it is anticipated that understanding the social, economic, and environmental effect of variable pricing on the GA 400 Extension will be critical to the ultimate implementation of variable pricing on the facility. This study specifically will look at:

- Assess the impacts on neighborhoods and low-income populations through the review of available socioeconomic data and use of an analysis tool developed by SRTA through a research project with Georgia Tech
- Assess the possibilities of using revenues from variable pricing techniques on improvement projects for alternative modes of transportation
- Evaluate air quality data to observe the current pollution caused by traffic delays at the toll plaza
- Pricing patterns needed to provide congestion relief in and along the corridor and revenues necessary to meet the roadway's financial obligations

### 4. ROLE OF ALTERNATIVE TRANSPORTATION MODES (DP 4)

The role of alternative transportation modes in the project, and anticipated enhancements proposed to be included in the pricing program [DP 4].

The State Road and Tollway Authority has been granted by Georgia law the ability to financially support alternative transportation modes. The cost benefits received from a variable based fee structure on the GA 400 Extension may allow SRTA to provide revenues to alternative modes of transportation. One example of this is the Buckhead MARTA station located in the interior of the GA 400 corridor. This transit station experiences some of the lowest usage when compared to other stations within the corridor. Variable pricing may provide an opportunity to develop revenues which will assist in improvements to the Buckhead station. This example gives details of one of many ways in which the revenues generated from variable pricing can be used to improve the community within the GA 400 corridor.

### 5. TIMELINE (DP 5 & SP 2)

A time line for the pre-project study and implementation phases of the project (proposals indicating early implementation of pricing projects that will allow evaluation during the life of TEA-21 will receive priority) [DP 5]. Time line for study and possible implementation of variable pricing projects [SP 2].

The GA 400 Variable Pricing Study will be conducted in two phases. The first phase is a feasibility of the institutional issues in advancing toward the variable pricing assessment and development of an implementation plan; and the final phase, is implementation, including detailed Environmental Assessments (or EA), investment grade traffic and revenue study and implementation.

This variable costing structure, if implemented, would be implemented quickly because minimal changes would need to be made to SRTA's current technological configuration. The variable pricing costing structure for the GA 400 toll plaza will require minimal construction costs for the Authority.

It is anticipated that phase one of the study will take approximately 12 months. Upon completion of phase one, the implementation phase of the project could begin in 24 months.

#### 6. DETAILED PROJECT TASKS (DP 6 & SP 6)

A description of tasks to be carried out as part of each phase of the project, and an estimate of costs associated with each [DP 6]. Plans for pre-project study, or findings from complete pre- project studies [SP 6].

#### Scope of Work

Task 1. Examine public perception and air quality effects of a variable price toll structure

This task provides resources for the Authority to perform analysis on the social and environmental affects of moving the GA 400 Extension from a fixed price toll collection system to a variably priced system.

- Public Outreach Resources will be provided to hold workshops and town hall style meetings along the GA 400 corridor to educate and receive input from citizens, businesses, and other interested parties on the potential for changing the toll characteristics of the GA 400 Extension.
- Equity Analysis- Resources will be provided to analyze the most current socio-economic data for the GA 400 corridor. An equity analysis tool developed by Georgia Tech for SRTA's use in analyzing the equity impacts of toll facilities will be used to determine any equity issues that should be addressed by SRTA.
- Air Quality- Resources will be provided to perform preliminary estimates of air quality emissions changes on the GA 400 Extension using a variably priced toll collection system. Data collection and modeling will be performed to determine the potential air quality benefits derived from this operational change.

March 15, 2005

*Task 2: Examine the internal processes and procedures of the Authority.* 

The objective of this task is to examine the internal processes and procedures currently in use by the Authority. The Authority's current business model is based on a consistent fixed-price toll collection system. Moving to a variably priced toll system would require changes in how the Authority operates. This task would identify internal processes and procedures (including but not limited to accounting and intelligent infrastructure) that are most affected by a change to a variable price toll collection system.

Task 3: Examine legal, contractual arrangements and bond covenants for the GA 400 Extension

The objective of this task is to perform an institutional study at the State Road and Tollway on the current contract, bond covenants, and local, state, and federal laws relating to the GA 400 Extension. To adequately determine if variable pricing can be implemented at the GA 400 Extension toll facility, subject matter experts will need to determine which policies, procedures, contracts, and possible state statutes will need to be altered in order to transition smoothly into a new pricing structure. Particular attention would be given to the bond covenants which describe what pricing techniques can be utilized for collection on the GA 400 Extension.

Task 4: A conceptual traffic and revenue forecast will be preformed to determine if various variable pricing scenarios will generate revenue necessary to meet the Authority's financial needs.

The purpose of this task is to ensure that sufficient revenues are generated to repay bonds, administration and operating and maintenance expenses of the Authority from any change in toll operations proposed for the GA 400 Extension. A conceptual traffic and revenue analysis will be performed. This will include data collection and modeling for the GA 400 Extension (in this context, parallel roadways will be included) and estimation of project revenues from one or more variably priced tolling scenarios.

Task 5: Develop a comprehensive implementation plan which addresses any internal or external changes that are necessary for implementation of variable tolls including public outreach and education.

The objective of this task will be to develop an Action Plan that will allow SRTA to forward with a variable pricing scheme for phase 2. This will include tasks and steps that will provide alternative means of addressing issues identified in Tasks 1, 2, and 3. This will also include an examination of user and Authority costs and environmental considerations that must be undertaken in phase 2.

#### Study Budget

A proposed study budget has been developed by major task for the Phase 1 work program. The Value Pricing Program is expected to cover 80% of the eligible project costs; SRTA will provide the remaining 20%. It is anticipated that all the tasks for phase one will take place in 360 days. Some of the proposed tasks will run concurrently.

#### **Summary of Funds (Requested and Match)**

| To | usk  | Federal Funds<br>Requested | Local Match | Total     | Estimated<br>Schedule |
|----|--|----------------------------|-------------|-----------|-----------------------|
| 1. | Examine public perception and air quality effects of a variable price toll structure | \$96,000                   | \$24,000    | \$120,000 | 60 Days               |
| 2. | Examine Internal Processes and Procedures  | \$64,000                   | \$16,000    | \$80,000  | 90 Days               |
| 3. | Examine legal, contractual arrangements and bond covenants for GA 400 Toll Road      | \$64,000                   | \$16,000    | \$80,000  | 90 Days               |
| 4. | Conceptual Traffic and Revenue   | \$144,000                  | \$36,000    | \$180,000 | 90 Days               |
| 5. | Implementation Plan  | \$76,000                   | \$19,000    | \$95,000  | 60 Days               |
| Pi | hase 1 Totals  | \$444,000                  | \$111,000   | \$555,000 | 360-Days              |

# 7. EVALUATION (DP 7)

Plans for monitoring and evaluating value pricing implementation projects, including plans for data collection and analysis, before and after assessment, and long term monitoring and documenting of project effects [DP 7].

The data collected in all tasks will be used to evaluate the ultimate implementation of the project as well as how the project has met its stated goals. The following deliverables will be used to monitor and document the project:

- 1. Documentation public outreach efforts (Tasks 1)
- 2. Documentation of methodology and results of the traffic and revenue study (Task 4)
- 3. Meeting of milestones or deliverables that are part of the Implementation Plan (Task 5)

### 8. FINANCIAL PLAN (DP 8)

A detailed finance and revenue plan, including for implementation projects a budget for capital and operating costs; a description of all funding sources, planned expenditures, proposed uses of revenues, and a plan for projects to become financially self- sustaining (without Federal support) within three years of implementation [DP 8].

The finance and revenue plan will be determined following phase 1, since the operating and pricing strategy that will be used is unknown at this time. At the conclusion of Phase 1, a detailed costing and preliminary design shall be conducted. A detailed finance and revenue plan will be developed at that time.

Irrespective of the ultimate financial package for implementation of variable pricing on 400, it is envisioned that all Variable Pricing Pilot Program dollars be utilized during Phases 1 and 2 will be utilized within the three-year time frame.

# 9. PLANS FOR INVOLVING KEY AFFECTED PARTIES (DP 9 & SP 4)

Plans for involving key affected parties, coalition building, media relations, etc., including either demonstration of previous public involvement in the development of the proposed pricing program, or plans to ensure adequate public involvement prior to implementation [DP 9]. Extent of public participation in the development of the proposal, or of plans for future public participation activities. Potential equity consequences of any proposed projects should be portrayed in general terms, and if adverse impacts are anticipated, preliminary plans for responding to such problems should be identified [SP 4].

Building on the focus groups and corridor survey information developed during this initial phase, SRTA will work with key stakeholders and planning partners to develop understanding and support for the implementation of variable pricing on the GA 400 Extension. The primary thrust of involving key affected parties and key stakeholders is the ultimate goal of implementing a long-term variable pricing toll collection system on the GA 400 Extension.

### 10. LEGAL AND ADMINISTRATIVE REQUIREMENTS (DP 10 & SP 5)

Plans for meeting all Federal, State and local legal and administrative requirements for project implementation, including necessary Federal-aid planning and environmental requirements. The FHWA will give priority to proposals where projects are included as a part of (or are consistent with) a broad program addressing congestion, mobility, air quality and energy conservation, where an area has congestion management systems (CMS) for Transportation Management Areas (urbanized areas over 200,000 population or those designated by the Secretary) and the congestion mitigation and air quality (CMAQ) program [SP 10]. Legal and administrative authority needed to carry out a value pricing project, extent to which these have been obtained, and further steps needed to obtain necessary authority [SP 5].

SRTA, GRTA, and GDOT are active participants in the Atlanta Regional Commission (the Metropolitan Planning Organization for the Atlanta region), as well as a recipient of both FHWA and FTA funds. All three agencies have in place appropriate mechanisms to ensure that all federal and state requirements are met. Required approvals, clearances, and coordination from and with appropriate federal, state, and local agencies will be obtained prior to implementation.

### 11. SIGNATORIES TO FHWA COOPERATIVE AGREEMENT AND SUPPORT (SP 3)

Parties proposed as being signatories to the cooperative agreement with the FHWA. At a minimum, by the time the refined proposal is submitted, the local Metropolitan Planning Organization (MPO) and the owner/operator of the facility or facilities to be priced should express support for the program. Indications of support from affected parties, including representatives of business, labor, industry, transportation users, and/or local residents, or plans for obtaining such support should be included [SP 3].

The following parties are proposed as being signatories to the cooperative agreement with the FHWA:

1. Georgia Department of Transportation (GDOT)